

**METHOD FOR FABRICATING A MASK USING A HARDMASK AND METHOD
FOR MAKING A SEMICONDUCTOR DEVICE USING THE SAME**

Abstract of the Disclosure

5 A bilayer hardmask 26 is used to manufacture a mask 10, which is can be
implemented to pattern a resist 165 on a semiconductor wafer 150. In one embodiment, the
bilayer hardmask 26 has two layers: a first hardmask layer 28 and a second hardmask layer
30. The first hardmask layer 28 may be carbon and can be etched selective to the overlying
second hardmask layer 30 and an underlying absorber structure 20. In one embodiment, the
10 second hardmask layer 30 is a transparent layer of SiON, SiN, or SiO₂. The bilayer hardmask
26 allows for a thinner resist to be used during fabrication of the mask 10.